Effect of reduced discharge of water flow on power generation

2470. DR. K. KASTURIRANGAN: Will the Minister of POWER be pleased to state:

(a) whether it is a fact that there is reduced discharge across Sutlej, Beas and Yamuna Basins, that is resulting in reduced power generation in the recent years;

(b) if so, the reasons therefor;

(c) whether Government has any plans to augment the water flow to enable power houses to operate their optimal capacity; and

(d) if so, the details thereof?

THE MINISTER OF POWER (SHRI P.M. SAYEED): (a) The inflows in Sutlej during the years 2000-01, 2001-02, 2004-05 and in Beas during the year 2002-03, 2003-04 and 2004-05 have been less and below dependable year inflows. The available flow data for river Yamuna does not clearly indicate natural reduction in the flow of river Yamuna. During the year 2004-05 discharge in Yamuna basin was on a lower side than the discharge available in the previous year. The reduction in inflows has resulted in reduced power generation. However, inflows in Sutlej and Beas during the current year 2005-06 so far have been very good. Consequently the generation has also been higher than the previous year.

(b) Inflows in the rivers are contributed by snow melt and rains. The reduced inflows in the above mentioned years has been due to less rains/ snow fall in the catchment area.

(c) and (d) Hydro Electric Stations are either of run-of-river type or storage type. Generation in run-of-river power stations depends upon the discharge available in the river and there is either no pondage or very less pondage available. As such, generation in such plants would depend mainly on the inflows which in turn depends upon rainfall/snowfall in the catchment area of these stations. Reservoir based stations enable water to be stored in the monsoon period which could be utilised during lean period of the year. Government is having plans to construct both types of stations depending upon water availability and topography of the site.

In Sutlej basin, Bhakra (1325 MW) is a reservoir based station in operation and Khab Storage scheme (636 MW) is under investigation. In Beas basin, Pong (396 MW) is a reservoir based station in operation. In Yamuna Basin, Lakhwar-vyasi (420 MW), Kishau (600 MW) and Renuka (40 MW) are the planned reservoir based projects. The water flow from reservoir schemes can be regulated to enable power houses to operate to their optimal capacity.

Benefit to the people of Assam by Subansiri Lower Hydroelectric Project

2471. SHRI SILVIUS CONDPAN: Will the Minister of POWER be pleased to state:

(a) what direct and indirect benefits that will accrue for the people of Assam during and after the commissioning of Subansiri Lower Hydroelectric Project;

(b) the initiatives taken by the present Government in development of Hydroelectric Projects in North-Eastern States; and

(c) how many MW of hydropower are proposed to be added during the Tenth Plan period and how many mega watts of hydropower projects are proposed to be commissioned during the Eleventh Plan period?

THE MINISTER OF POWER (SHRI P.M. SAYEED): (a) The Subansiri Lower Hydroelectric Project (2000 MW) in Arunachal Pradesh is being implemented in the Central sector by National Hydroelectric Power Corporation Limited (NHPC). The project is located in the Lower Subansiri/ Dhemaji Districts of Arunachal Pradesh/Assam. Some of the benefit that would accrue to the State of Assam during implementation and after completion of the project include:

- Its share from the 12% free power from the project.
- The project is a part of the cascade development of Subansiri basin in the State of Arunachal Pradesh and will provide flood moderation benefits to some extent in the Assam area which suffers huge loss of life and property due to floods.
- Development of roads and communication system passing through Assam and leading to the project.